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REPORT ON THE OIL SPILL IN THE ANACOSTIA RIVER JANUARY 18, 1968

Federal Water Pollution Control Administration
Charlottesville, Virginia

January 1968

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ACKNOWLEDGMENT

The Middle Atlantic Region wishes to thank the National Park Service, District of Columbia Department of Public Health and the Corps of Engineers for their assistance in the investigation and cleanup of the oil spill in the Anacostia River.

Special thanks is extended to the American Oil Company, Yorktown, Virginia, for making available its boom which played a major role in the cleanup operations.

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SUMMARY

The Middle Atlantic Regional Office was notified on Thursday, January 18, of an oil spill of unknown origin on the Anacostia River near the 11th Street Bridge in Washington, D.C. On the basis of the information obtained, a team was sent to the scene to assess the extent and severity of the spill and determine the course of action to be taken.

Oil was found scattered in numerous small slicks varying from 20 to 300 square feet in area, for a distance of approximately 3,500 feet upstream from the 11th Street Bridge which is about two and one-half miles from the confluence with the Potomac River. The oil for the most part was concentrated in the slack water areas, leaving the main channel free except for an occasional rainbow film. Of immediate concern was the possible damage to the paint of watercraft moored at the marinas and the possibility of scattering the oil along other shorelines or into the Potomac River as a result of tidal action or adverse wind conditions.

It was decided to remove the oil. Emulsifying agents were considered but discarded because debris intermingled with the oil would not permit adequate mixing of the chemical. The method selected was to use a boom to contain the oil and straw to remove it from the water. → p 2

Friday morning the cleanup operation was begun and by 4 p.m. successfully completed, with the removal of approximately 300 to 400 gallons of oil.

The cost of the cleanup totaled $710, including expenditures for personnel, equipment, transportation, material, travel and report preparation.

Damages were minimal because of the prompt removal of the oil and limited to minor staining of the watercraft and north bank of the Anacostia River. A report that about 50 waterfowl appeared to be in distress due to an oil slick upstream could not be confirmed upon investigation.

The source of the oil has not been identified at this time. The Steuart Petroleum Company admitted to the Corps of Engineers that a small spill of about 3 to 5 gallons of No. 6 oil occurred during unloading operations of a barge on January 16, at its M Street terminal. Samples of oil from the river have been sent to the Naval Petroleum Laboratory at Norfolk for analysis. A supplement to this report will be prepared upon receipt of the results.

SITUATION

On Thursday, January 18, 1968, the Middle Atlantic Regional Office was notified of an oil spill of unknown origin in the Anacostia River. The oil was reported to be concentrated along the river's north bank adjacent to the National Park Service property at the approximate location of the Anacostia Marina (See Figure 1).

The Corps of Engineers was contacted and it was learned that they had been previously alerted and had instructed their Drift Collection Crew in the area to investigate. On the basis of the additional information obtained from the Corps of Engineers, an engineer was directed to conduct an investigation and determine the course of action. The District of Columbia Department of Public Health (the official water pollution agency) and the National Park Service were notified and invited to participate in the investigation.

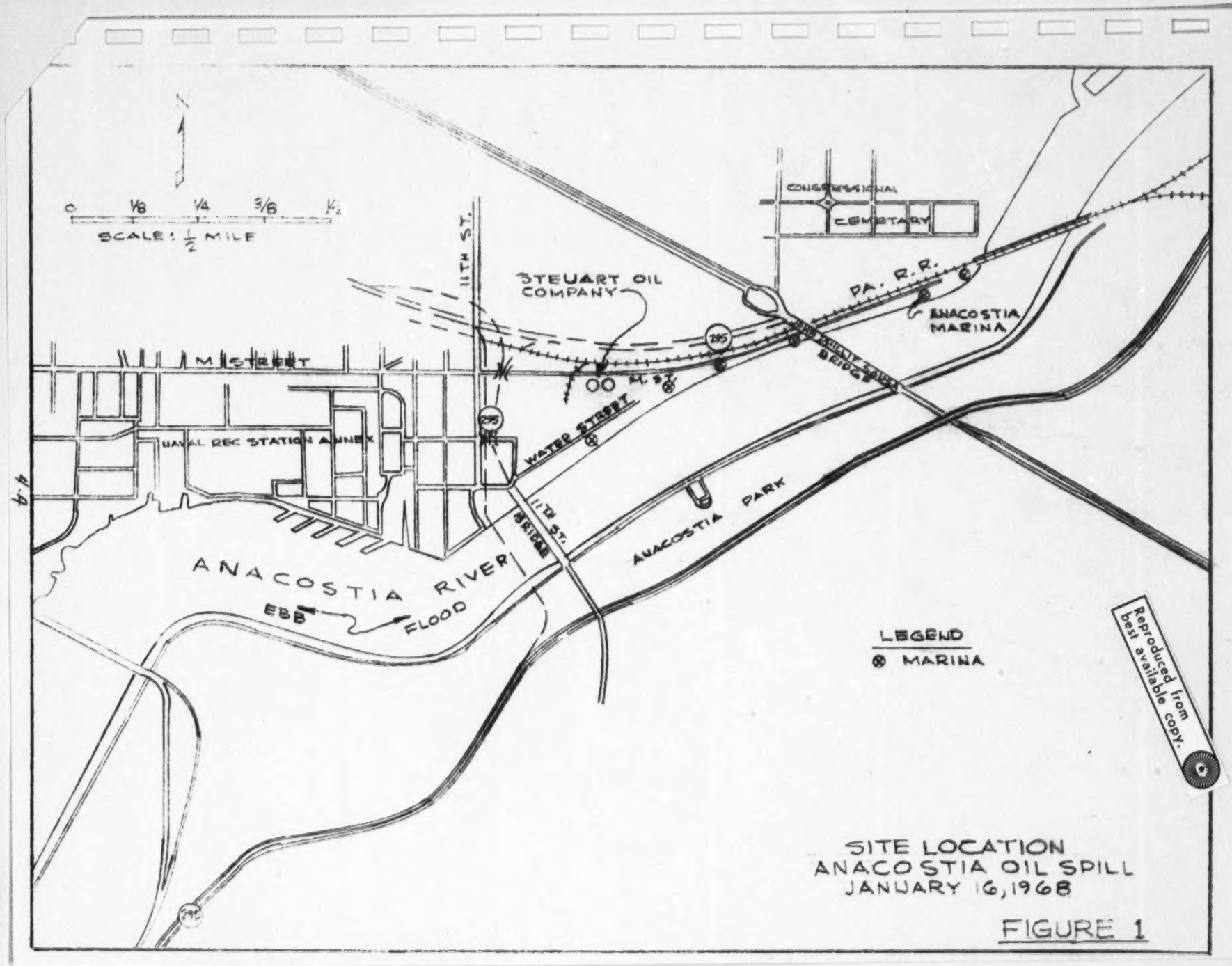
The investigation of the river confirmed the reported spill. Oil was concentrated along the north bank of the river in numerous small slicks, approximately one-half inch thick, varying from 20 to 300 square feet in area. The main channel of the river was generally free of oil with the exception of an occasional light rainbow film. The operator of the Anacostia Marina, who reported the spill, stated he observed small quantities of oil on January 17, which gave him little concern until the morning of the 18th, when he noticed the concentration was increasing.

The conditions were such that the oil remained along the north shore; however, it was evident a change in wind conditions could move the oil to other shoreline areas along the river or into the Potomac Estuary. To eliminate this possibility the decision was made to remove the oil as quickly as possible.

The use of emulsifying agents was considered, but discarded as the chemical and oil could not be adequately mixed because of the large amount of debris intermingled with the oil. The method selected was to install a boom and use straw as an adsorbent to remove the oil.

Meanwhile the Corps of Engineers, under its authority contained in the 1899 Refuse Act, was trying to determine the origin of the oil but was unsuccessful. They reported that the Steuart Petroleum Company admitted to the spilling of approximately 3 to 5 gallons of No. 6 oil during unloading operations of a barge at their M Street terminal, located 3,000 feet downstream from the Anacostia Marina. According to the Company the spill occurred when an air pocket in the transfer line expanded during disconnect operations.

Samples of the oil from the river were collected and sent by the Regional Office to the Naval Supply Center, Petroleum Laboratory, Norfolk, Virginia, for analysis.



SITE LOCATION
ANACOSTIA OIL SPILL
JANUARY 16, 1968

FIGURE 1

4-4

CLEANUP OPERATIONS

The method selected for removing the oil required the use of a boom. Investigation revealed the only boom available (350 foot neoprene boom) was located at the American Oil Company at Yorktown, Virginia. Arrangements were made with the Company to use the boom and a trucking company was engaged to deliver it to the Anacostia Marina by 7 a.m. the following morning.

Friday morning the observations on the river revealed that the oil slicks downstream from the Anacostia Marina had been dissipated during the night leaving no visible evidence. The remaining oil was concentrated in the Anacostia Marina, and estimated to be between 300 to 400 gallons. The tide was flooding, winds varied from 0 to 3 knots, wave heights were from 0 to 4 inches, and the temperature was around freezing in the AM, with an expected high of 50°F. Conditions were at the best for efficient removal of the oil.

Arrangements for personnel and equipment for the cleanup operations were coordinated with the several Federal agencies concerned. The National Park Service furnished four men, a dump truck, and 20 bales of straw. The Corps of Engineers Drift Collection Crew provided five men, a barge, and a tug. The Marina operator furnished three men and two small work boats. The District of Columbia Department of Public Health made arrangements to provide additional manpower, if needed.

Utilizing a small work boat, the boom was positioned to collect the oil in the vicinity of the Marina and to contain it in an area of approximately 15,000 square feet. Straw was spread over the oil and manually pushed shoreward into a marine railway ramp from which it was removed and transported to the Kenilworth Dump for final disposal. The cleanup operation was successfully completed by 4 p.m. Friday, and all that remained of the oil was a few rainbow films.

In our conversation with the Steuart Petroleum Company concerning the spill the Company disclaimed any responsibility and declined an invitation to participate in the cleanup.

Federal Water Pollution Control Administration funds were used to cover the expenses incurred by the cleanup operations. The following is a breakdown of the expenditures:

Personnel (9 men)	$318
Transportation of boom	250
Equipment and Materials (Dump truck and straw)	36
Other (travel and report preparation)	106
TOTAL	$710

Photographs showing the oil slicks and cleanup operation are contained in the Appendix.

DAMAGES

The damages were minimized by prompt removal of the oil. Some oil stains, which are expected to disappear in a short time, remain on the north bank or seawall of the Anacostia River for a distance of approximately 4,000 feet, and minor staining of watercraft docked in this area was noted. In the latter case the stains can be removed through washing with detergents.

The Corps of Engineers Drift Collection Crew reported that on Wednesday, January 17, they spotted approximately 50 ducks which appeared to be in distress because of an oil slick. Upon investigation this could not be confirmed.

Because of the minor nature of the damages no attempt was made to evaluate them in monetary terms.

FUTURE ACTION

The oil spilled in the Anacostia River has not been conclusively traced to a definite source. The samples that have been forwarded to the Naval Petroleum Laboratory are being analyzed and upon receipt of the results a supplement to this report will be prepared.

The experience with this oil spill points out the need for booms to be readily available in the Washington, D. C. area. The Regional Office intends to pursue ways and means of accomplishing this.

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Oil and trash in Anacostia Marina before cleanup

Marina after cleanup

Oil and trash in the Anacostia Marina

Installation of 350 foot boom
to contain oil

Spreading straw on oil slick in
Anacostia Marina

Application of straw to oil slick
Note: Containment boom in upper left

Straw spread on oil

Working oil and straw to marine railway ramp

Working oil and straw to marine railway ramp with raft and work boat

Mixture of oil and straw in the ramp

Loading oil soaked straw into the truck